## **Edmonds Sustainability Heroes**

Jim Stevens



On December 1, 2015, Cynthia Pruitt and Mike Nelson interviewed Jim Stevens, Facilities Maintenance Manager with the City of Edmonds. All three – Cynthia, Mike and Jim – are members of the Mayor's Climate Protection Committee of Edmonds. Mike Nelson is also a City Councilmember. Jim has been an active member of the committee, both in reporting the city's success in reducing energy consumption of city facilities as well as interviewing community residents, businesses, and institutions to learn and pass along stories of their successes. Jim will be retiring at the end of January. The following article celebrates his efforts and successes in reducing the city's energy consumption.

Jim first became interested in this work while employed at Lake Washington Institute of Technology, an all-electric college served by Puget Sound Energy. He lobbied his supervisor to take on initiatives to reduce energy consumption after a widespread power crunch in December 2001. He saw, as a result of that incident, that reducing energy was a critical direction they needed to explore.

He was influenced significantly when he read <u>Earth in the Balance</u> (Al Gore). Because he also saw government agency budgets were shrinking year by year, he realized he needed to do something to cut expenditures or lose personnel. His chosen method to reducing operational costs was through energy savings. He continued to read, enrolled in classes, and explored methods to lower energy and operational expenses in the facilities he managed.

When he came to work at the City of Edmonds, the City was just finishing an ESCO (Energy Savings Contract) project to reduce the City's energy consumption. Its scope included installing electronic controls for the heating/air systems in several buildings and a generator at city hall. This project resulted in dropping energy consumption at the Library alone by nearly 50%. He has since worked on projects at many of the city facilities. This even includes streetlights, replacing HID lights with energy efficient LED lighting. With grant assistance from the federal government, he replaced the Public Works yard lighting, too. At City Hall, further reductions were attained by reducing the number of lamps in fixtures and installing highly reflective pans above the remaining to bring more light out of the fixture and into the workspaces. In all of these projects energy consumption was reduced, thereby reducing operating costs.

Jim was integrally involved in coordinating the City's participation in the community solar installations at the Francis Anderson center in 2011 and 2012. Since the second phase of this installation was completed, more than 72,000 kWh has been produced by the solar panels, and this power was purchased by the City thereby avoiding purchasing the same amount from the PUD.

An additional enhancement to the Senior Center's efficiency came in 2014 with the replacement of the roof top heating units with more efficient ones and enhancements with electronic controls that introduce outside air based on the amount of CO<sub>2</sub> present in the areas served. Senior Center billings for natural gas consumption have taken a plunge of about 33% compared year for year. Electronic controls enable the Facilities Manager to monitor, adjust, and schedule what is happening in city facilities from a central desktop computer.

Jim explained that one key tool he uses which is also available to the rest of us is 'Portfolio Manager' software. By using this publicly available software he can track 16 major gas/electricity meters for city facilities. (Go to <a href="https://www.energystar.gov">www.energystar.gov</a>). His point is that it is tough to chart a course to where you want to be if you don't know where you stand today.

Jim recommends these types of changes to others. To other facilities managers (or residents) embarking on a project he recommends leveraging the work with grant dollars whenever available and not to be hesitant to start small. This is perhaps the most consistent message he has heard throughout the interviews for the Edmonds Sustainability Heroes stories and he fully agrees with it. For example, start by replacing lighting with high-energy efficient LED bulbs wherever possible. The energy efficient lighting not only reduces the production of greenhouse gases, but also enhances the lighting for buildings, especially in outdoor applications. Small improvements like this pay back investments quickly.

He also recommends using tools like 'Portfolio Manager' to track what you are already consuming before embarking on large investments to reduce energy use. Once improvements are made, 'Portfolio Manager' can help validate what has been achieved and then assist to indicate the next logical changes.

Recently, through his efforts and the work of city employees to reduce energy, Edmonds City Hall improved its ENERGY STAR rating to 90 – putting it in the top 10 percent of comparable buildings nationwide. This building first earned the ENERGY STAR label in 2010 when it moved from a ranking of 79 to 80, and subsequent efforts have moved it to this higher efficiency.

Asked how he achieved his continuing successes in reduced energy use, Jim explained he gets a kick out of "gamifying" his efforts. By competing with himself to monitor and schedule building set points effectively, audit thermostats, adjust lighting, etc., he has been able to achieve significant energy savings. Last year he and his wife purchased a new Toyota Camry hybrid, and he employs this same strategy to see how far he can push its gas economy. The best tank so far came last summer at 52.1 mpg, a large improvement over the EPA rating of 40.

If not for impending retirement, he would love to tackle some promising city projects. He pointed out that several flat-roofed city facilities have ideal exposure for solar installations, potentially bringing energy savings to the city. He would also have loved to create a modern, energy efficiency "showplace" of the city maintenance shop located within City Park.

We thank Jim for his many years of service to the City and the many kWh and therms his efforts have conserved. Best wishes in your next venture, Jim!